



# What You Should Know

#### Q. What is lead?

Lead is a metal and because it melts easily and quickly, it can be molded or shaped into various things such as fishing sinkers. It also has been used in paint, gasoline, ceramic glazes and some vinyl products, such as miniblinds.

#### **Q.** How does lead get into a person's body?

A person can either inhale (breath-in) or ingest (swallow) lead from air or dust, or from sources such as paint. In the human body, lead is not safe at any level. When the lead in a person's blood reaches a certain level, he or she is poisoned.

#### **Q.** Who is affected most by lead?

Lead can affect all people, but pregnant women, babies and young children are most at risk. Young children are at special risk because their growing bodies process lead differently from adults. Lead interferes with brain development. Children between one and three years old are especially sensitive to the effects of lead. This is also the time when a child's normal behavior—gumming, teething and increased hand-to-mouth activity—makes ingesting lead more likely. As infants crawl, they may pick up lead dust from the floor, from their toys and from pets. The lead gets

into their bodies when they put their hands in their mouths, eat with their hands, or suck their thumbs or toys.

# **About LEAD Poisoning:**

#### Q. How are adults exposed?

Adults employed in lead-based industries such as lead smelters, soldering electronics, battery manufacturing or recycling are constantly being exposed to the poison. Those who have hobbies such as reloading ammunition, glazing ceramics, or working with stained glass may be exposed to lead as well. Adults either inhale polluted air and fumes, or ingest lead dust that has settled on hands, clothes, food and drinks. Such adults may carry "take home" lead from their workplace, which may poison family members, particularly children. "Take home" lead is usually found as dust on clothing, in workshops and in vehicles.

### **Q.** What are the harmful effects of lead?

Harmful effects of adult exposure include a variety of symptoms such as nausea, stomachaches, headaches, memory and concentration loss, muscle or joint pain, weakness of limbs, etc. It can also cause high blood pressure, reproductive difficulties and sexual dysfunction. Even when there are no noticeable symptoms, lead may cause severe permanent damage to the body.

Children with low-level poisoning may show no obvious symptoms. At higher levels, common symptoms include headaches, stomachaches, cramps or vomiting. The child may be unusually tired, cranky, and clumsy, or lose interest in playing. Lead poisoning also reduces intelligence (loss of IQ points), causes reading and learning disabilities, and can also cause hyperactivity and reduced attention span. It can also cause loss of hearing and delay a child's standing, walking and talking. Diagnosis can be difficult. By the time symptoms are seen, the damage has been done. Much of the damage caused by lead poisoning is permanent.

### **Q.** Is there any special danger in exposure to lead during pregnancy?

Yes, pregnant women and their unborn children are especially at risk from lead. Once lead is in the blood, it can easily reach and harm the unborn baby. Lead exposure is a risk throughout the pregnancy. Pregnant women absorb much more of the lead they ingest than other adults do, so reducing exposure before and during pregnancy is especially important.

### **Q.** How can a person find out whether he or she has had recent lead exposure?

The only way to know for sure is with a blood test. A simple blood test can show whether or not a person has been recently exposed to lead. There is no good way to measure past lead exposure. Adults who work with lead should be tested on a regular basis. This is often the employer's responsibility. Children under 6 should also be tested for blood lead levels. Screening is usually done at 12 and 24 months of age. In high-risk children, screening should start at 6 months. High-risk children are those who:

- O Live in homes built before 1978, especially built before 1950;
- Live with an adult whose job or hobby involves the use of lead;

 Have a brother or sister or playmate with a high blood lead level; or

O Live near an industry likely to use lead.

## **Q.** Does an elevated blood lead level mean that a person is poisoned?

In adults, the diagnosis of lead poisoning is usually made after looking at several things in addition to the blood lead level. Some of these things are the symptoms, results of a physical exam, laboratory tests for kidney function and tests to look for nervous system damage. In children, the diagnosis always involves a blood lead test, but may also include testing for developmental delays.

#### **Q.** What is the treatment for lead poisoning?

A. Treatment options are limited, but the best method for preventing further lead poisoning is to avoid continued exposure to the source of lead. Improving the safety of places where the affected person lives, plays and works are important. The home or work place may need to be treated, as well as treating the patient. Proper nutrition and frequent hand washing are important. The patient's doctor will determine the medical steps to take depending upon the person's blood lead level.

### **Q.** What can parents do to protect their children?

Ask your health care provider if a lead test is right for your child. Serve three nutritious meals and two to three healthy snacks every day. Less lead is absorbed when a child's stomach is full. Serve foods high in Iron, Vitamin C and Calcium. Use cold tap water for drinking, cooking and preparing formula for infants. (Cold water can contain less lead than hot water.) Let tap water run for 2 minutes before using. Keep all medical appointments and follow-ups.

### **Q.** What are the common sources of lead in the environment?

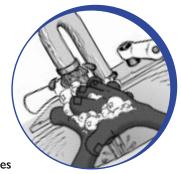
#### Answers.

- O Paint used in homes built before 1978
  - Toys and furniture
  - Dust and soil contaminated with flaking or chipping paint and from lead in gasoline
  - Some vinyl miniblinds (Look for ones that say "Lead Safe" or "No lead added.")
- Food stored in poorly glazed pottery and in tin cans soldered with lead
- Food grown in lead contaminated soil
- Water contaminated by plumbing using lead pipes, fixtures or solder

### **Q.** Can lead poisoning be prevented?

Yes! This environmental illness is completely preventable.

Prevention is very important because, once poisoned, the harmful effects of lead are permanent. Learning about the dangers of lead and the sources of lead in our home, yard or workplace,



avoiding the sources, and frequent and thorough cleaning and hand washing are all important ways of preventing lead poisoning.

#### **Q.** What is occupational lead exposure?

Occupational exposure to lead is that which occurs while working in a lead based industry or engaged in a hobby involving the use of lead. Some examples of occupational lead exposure are:

- O Breaking up old lead batteries;
- O Using a torch on lead painted steel;
- Remodeling and renovation work;
- Sanding, scraping or blasting lead based paint;
- Handling scrap metal;
- Soldering electronic, stained glass or radiators;
- Shooting in and cleaning indoor firing ranges;
- Smelting operations in bronze, brass or iron foundries;
- Handling artist pigments.

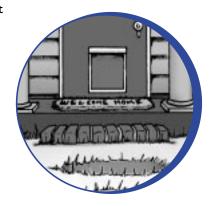
Examples of hobbies and do-it-yourself activities involving the use of lead include:

- Making bullets or fishing sinkers;
- Making stained glass or making and glazing pottery;
- Disturbing (sanding) or removing lead based paint in home renovations.

# **Q.** What needs to be done to prevent lead poisoning?

#### **Answers.**

- Maintain painted surfaces. Keep the paint intact and in good condition. Painting over chipping or peeling lead-based paint does not make it safe!
- Be aware that lead-based paint may have been used on cribs, highchairs, windows, woodwork, walls, doors, railings and ceilings.
- Don't let your child eat or chew on anything you think may have lead on it. Look for teeth marks on the woodwork and mini-blinds in your home.
- O Be sure to clean the windowsills often. Loose paint and dust can build up in the window area. Clean it often with soap and water.
- Keep your home as dust-free as possible. Damp dust mop to remove lead. Vacuuming or dry dusting may spread lead dust into the air. Household dust can contain small pieces of lead from paint chips or soil tracked into the home. Your house can look clean and still have lead in it. A child can breath-in or eat this dust.
- Wash your child's hands after playing, before eating, naps and bedtime.
- Wash bottles, teething rings and toys often.
- Adults working in jobs where lead is used should shower and change clothes before coming home. This includes painters, remodelers, or workers in smelters, battery plants, and radiator or auto body shops.
- Clothes worn at work should not be washed with other clothes.
- Use a doormat to wipe feet before entering the house or leave shoes at the door.
   Keep windows closed on windy days so dust does not get into the house.



#### South Carolina... Lead-Safe for Life.

Brought to you by the South Carolina Department of Health and Environmental Control's Childhood Lead Poisoning Prevention Program.



Women and Children's Services
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